AMENDMENTS TO THE SPECIFICATION

Replace the Paragraph beginning at Page 1, line 22, with the following replacement paragraph:

A "Mobile IPv6" protocol is disclosed in an Internet Draft by Johnson et al., entitled "Mobility Support in IPv6", available on the World Wide Web at the IETF website address[[:]] ~~http://www.ietf.org/internet-drafts/draft-ietf-mobileip-ipv6-21.txt~~ "ietf.org/internet-drafts/draft-ietf-mobileip-ipv6-21.txt" (the disclosure of which is incorporated in its entirety herein by reference). According to Johnson et al., the Mobile IPv6 protocol enables a mobile node to move from one link to another without changing the mobile node's IP address. In particular, the mobile node is assigned a "home address". The "home address" is an IP address assigned to the mobile node within its home subnet prefix on its home link. While a mobile node is at home, packets addressed to its home address are routed to the mobile node's home link, using conventional Internet routing mechanisms.

Replace the Paragraph beginning at Page 2, line 14, with the following replacement paragraph:

A variation of the Mobile IPv6 protocol is disclosed in an IETF Internet Draft by Soliman et al., "Hierarchical Mobile IPv6 mobility management (HMIPv6)" October 2002, available on the World Wide Web at the IETF website address ~~http://www.ietf.org/internet-drafts/draft-ietf-mobileip-hmipv6-07.txt~~ "ietf.org/internet-drafts/draft-ietf-mobileip-hmipv6-07.txt"and incorporated in its entirety herein by reference. The Internet Draft by Soliman et al. discloses a Mobility Anchor Point (MAP) within an IPv6 network that implements HMIPv6 by assigning a regional care-of address to mobile nodes within its address realm. Mobile nodes may thus use on-link care-of addresses for communications within the address realm of the MAP, and the regional care-of address for IPv6 communications outside the MAP address realm. As such, the MAP serves as a local home agent.

Replace the Paragraph beginning at Page 2, line 28, with the following replacement paragraph:

Proposals are underway by the Next Generation Transition (NGTRANS) Working Group of the Internet Engineering Task Force (IETF) to enable network nodes to transmit IP packets, generated according to IPv6 protocol as specified by the Request for Comments (RFC) 2460, across an IPv4 network. In particular, RFC 3056 proposes an interim solution (referred to herein as "the 6to4 proposal") of sending IPv6 packets as payload for IPv4 packets, where an interim unique IPv6 address prefix is assigned to any node that has at least one globally unique IPv4 address. These RFCs are available at the IETF website on the World Wide Web at "ietf.org" ~~http://www.ietf.org~~, and these RFCs 2460 and 3056 are incorporated in their entirety herein by reference.

Replace the Paragraph beginning at Page 4, line 6, with the following replacement paragraph:

One proposal for traversing a NAT by an IPv6 node using automatic tunneling is described in an IETF Draft by Huitema, entitled "Teredo: Tunneling IPv6 over UDP through NATs", September 17, 2002, available on the World Wide Web at the IETF website address[[:]]] "ietf.org/internet-drafts/draft-ietf-ngtrans-shipworm-08.txt" ~~http://www.ietf.org/internet-drafts/draft-ietf-ngtrans-shipworm-08.txt~~.

Replace the Paragraph beginning at Page 8, line 2, with the following replacement paragraph:

The disclosed embodiment is an improvement of the arrangement disclosed in the above-incorporated parent application No. 10/383,567, filed March 10, 2003 (hereinafter "parent application") directed to tunneling IPv6 packets across an IPv4 network based on use of IPv6 based reverse routing headers. The generation and use of reverse routing headers was published on June 19, 2002 by the inventors as an Internet Draft, "IPv6 Reverse Routing Header and its application to Mobile Networks" available on the World Wide Web at the IETF website address

"ietf.org/internet-drafts/draft-thubert-nemo-reverse-routing-header-00.txt"

~~http://www.ietf.org/internet-drafts/draft-thubert-nemo-reverse-routing-header-00.txt~~ and is

incorporated in its entirety herein by reference. A more recent version was published October

11, 2002, available on the World Wide Web at the IETF website address

"ietf.org/internet-drafts/draft-thubert-nemo-reverse-routing-header-01.txt"

~~http://www.ietf.org/internet-drafts/draft-thubert-nemo-reverse-routing-header-01.txt~~ and

incorporated in its entirety herein by reference.

     Replace the Paragraph beginning at Page 8, line 29, with the following replacement

paragraph:

     Figure 1 is a diagram illustrating a network 10, where a mobile IPv6 network 12 is

configured for establishing an IPv4 tunnel 13 across an IPv4 network 14 to a destination IPv6

network 16. In particular, the mobile network 12 includes at least a mobile router (MR) 20a

configured for sending and receiving packets according to IPv6 protocol. The mobile router 20a

also is configured for communications with a corresponding home agent (HA) 24 configured for

forwarding packets, addressed to the mobile router home address, to the mobile router 20a's care

of address (CoA), according to Mobile IP Protocol as described in an IETF Draft by Johnson et

al., entitled "Mobility Support in IPv6", January 20, 2003, available on the World Wide Web at

the IETF website address "ietf.org/internet-drafts/draft-ietf-mobileip-ipv6-21.txt"

~~http://www.ietf.org/internet-drafts/draft-ietf-mobileip-ipv6-21.txt~~ (the disclosure of which is

incorporated in its entirety herein by reference).